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LAND POLICY CIRCULAR

August 1935

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The LAND POLICY CIRCULAR is issued by the Division of Land Utilization, Resettlement Administration, in cooperation with the Division of Land Economics of the Bureau of Agricultural Economics. Its purpose is to provide technical information in the field of land economics to assist the staff of the Resettlement Administration and its cooperating agencies and groups to keep in touch with current developments bearing upon their work. Its pages will serve as a clearing house for information concerning local, State, and Federal land planning activities and research.

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RECENT ACT PROVIDES FUNDS FOR AGRICULTURAL RESEARCH AND EXTENSION PROGRAMS

A recent Federal act "to provide for research into basic laws and principles relating to agriculture, and to provide for the further development of cooperative agricultural extension work and the more complete endowment and support of land-grant colleges", Public No. 182 (H.R.7160) was approved June 29.

The Act is divided conveniently into two sections, one providing research and one extension funds. Title I (research) contains sections as follows:

The Secretary of Agriculture is authorized to "conduct research into laws and principles underlying basic problems of agriculture in its broadest aspects, research relating to the improvement of the quality of and the development of, and new and extended uses and markets for, agricultural commodities and by-products and manufacture thereof; and research relating to the consumption, development and use of land and water resources for agricultural purposes." Research authorized under this section shall be in addition to research provided for under existing law.

Experiment Stations Aided

The Secretary is also authorized to encourage similar research at agricultural experiment stations including the States, Territories, and Puerto Rico.

$1,000,000 for First Year

For the research under this title there will be appropriated $1,000,000 for the first fiscal year, and for each of the four fiscal years thereafter $1,000,000 more than the amount authorized for the year preceding, and $5,000,000 for each fiscal year thereafter. Sums so appropriated shall be in addition to, and not in substitution for appropriations for research or other activities of the Department of Agriculture and experiment stations, and money so appropriated will be available for the purchase and rental of land, and equipment and maintenance of buildings, and for printing and disseminating results of the research.

Allocation of Funds

Forty percent of the sums appropriated for any fiscal year shall be available for theSecretary of Agriculture as described under Section 1 above, although not more than 2 percent may be used for administration. These sums shall be designated "Special research fund, Department of Agriculture", and none shall be used for prosecution of research already instituted, or for any new research unless approved by the Secretary. One-half of this fund shall be used by the Secretary for establishing and maintaining research laboratories and facilities in the main agricultural regions, etc.

Sixty percent of the appropriated sums shall be available to experiment stations (under Section 2) as follows:

The Secretary shall allot (for each fiscal year for which an appropriation is made) to Puerto Rico and each State and territory "an amount which bears the same ratio to the total amount to be allotted as the rural population of Puerto Rico or State or Territory bears to the rural population of all the States, Territories and Puerto Rico as determined by the last preceding decennial census." However, no allotment or payment shall be made for any fiscal year in excess of the amount which any Territory, State or Puerto Rico makes available for such fiscal year out of its own funds for research and facilities therefor. Should any State, Territory or Puerto Rico fail to make available in any fiscal year a sum equal to the total amount to which it may be entitled, the Secretary may withhold such amount, and allot an additional amount not to exceed 20 percent of the original allotment to those States, Territories or Puerto Rico, which make such sums available. These sums will be paid in quarterly installments each fiscal year.

Extension Activities Aided
(Title II)

In order to develop further the cooperative extension system for cooperative agricultural extension work between the agricultural colleges in the several States, there will be appropriated to pay expenses of cooperative extension work in agriculture and home economics and necessary printing to result, $8,000,000 for the first fiscal year, and $1,000,000 additional each fiscal year thereafter, until the sum of $12,000,000 annually has been reached, this amount to continue annually thereafter.

$980,000 of this sum shall be divided equally among the several States and Territory of Hawaii, the remainder shall be paid to the several States and Territory of Hawaii in the proportion that the farm population of each bears to the total farm population of the States and Territory of Hawaii. Moreover, the States and Territory of Hawaii shall not be required to offset the allotments of this section, and the sums provided are in addition to sums otherwise appropriated, though they are available only if the State and Territory of Hawaii complies each fiscal year with other provisions for offset of appropriations for agricultural extension work.

A third provision of interest appears in Section 22; in order to provide for the more complete endowment and support of the colleges in the States and Territory of Hawaii entitled to benefits otherwise provided for, there will be appropriated annually for each fiscal year $980,000 to be divided equally among the States and Territory of Hawaii. In addition there will be appropriated for the fiscal year following the first for which appropriation is made $500,000 and for each of two fiscal years thereafter $500,000 more than the amount authorized to be appropriated for the preceding fiscal year, and for each fiscal year thereafter $1,500,000 to be allotted and paid each State and Territory of Hawaii in the proportion which total population of each State or Territory of Hawaii bears to the total population of all States and Territory of Hawaii.

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WESTERN FARM ECONOMIC ASSOCIATION MEETS AT CORVALLIS

A considerable portion of the program of theWestern Farm Economic Association, which met at Corvallis, Oregon August 13-14, was devoted this year to planning, and to land problems and their solution. The general program was as follows:

August 13 - Relation of Economic Theory to Present Agricultural Programs - J.M. Tinley, University of California, Chairman
1. Laissez-Faire in Theory and Practice
   George M. Peterson, University of California
2. Evaluation of Present Agricultural Programs in Terms of Economic Theory
   M.R. Benedict, University of California

General Aspects of Regional Planning

1. The Place of Agricultural Planning in National Economy - J.M. Tinley
2. Farm Management Approach to Regional Planning - C.L. Holmes, Bureau of Agricultural Economics
3. Extension Work as Related to Regional Planning - L.M. Vaughan, U.S. Extension Service

Marketing Agreements - E.F. Dummeier, Chairman

1. Marketing Agreements forFruits and Vegetables Produced in California - H.R. Wellman, University of California
2. Some Experiences with Marketing Agreements in Oregon - Paul Carpenter, Oregon Agricultural College
3. Some Experiences with Marketing Agreements in Washington - E.F. Dummeier, State College of Washington

August 14 - Land Planning - David Weeks, Chairman

1. The Organization of Land-Use Planning in Oregon - A.S. Burrier, Resettlement Administration
2. General Aspects of Land Planning - David Weeks, University of California
3. Federal Program of Land-Use and Rehabilitation - R.E. Willard, Regional Director, Resettlement Administration
4. Land-Use Planning - H.E. Selby, Resettlement Administration
5. Rural Rehabilitation Program - Leslie S. Sorenson, Resettlement Administration
6. Objectives and Types of Development on Submarginal Land - Harry G. Ade, Resettlement Administration

The final sessions were concerned with the subject of "Production Control" - the program, agricultural trends, and proposed changes in programs.

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PROJECTS WILL DEMONSTRATE
ECONOMIC USE OF POOR FARM
LANDS

Of the $22,000,000 recommended by the Advisory Committee on Allotments of the Works Program for the use of the Resettlement Administration in purchasing land, $20,000,000 would be utilized to carry out a series of projects to demonstrate how poor farm land can be developed for valuable economic purposes. The remaining $2,000,000 has been tentatively assigned to provide lands for resettlement purposes.

These projects will emphasize the positive use of poor lands for purposes to which they are physically and economically suited. All land acquired under this program has some public value, for forestry, watershed protection, recreation, wildlife protection, or other public purposes.

That such projects are necessary is evident. The serious depletion of natural resources through erosion, the cutting of timber, and overgrazing of pasture lands have made it imperative that steps be taken to carry out the type of conservation work which private landowners cannot afford to undertake. The low incomes and unsatisfactory living standards of farm families in many poor land areas necessitate a program of rehabilitation to enable them to achieve economic independence on a higher living standard. Local governments have been financially handicapped by the frequent necessity of maintaining roads, schools, and other public services in poor farm areas which provided little or no taxes in return. The development of more economic methods of utilizing land will contribute to the solution of many local fiscal problems in areas where families are unable to make a living through farming.

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NEED FOR STATE PLANNING DESCRIBED IN REPORT

That Minnesota has come of age and is approaching a period of maturity, and is "now face to face with the sober and thought-provoking necessity of developing a way of life for a mature community" is demonstrated in the Report of the Minnesota State Planning Board, recently released.

This Report has been prepared jointly by the Minnesota State Planning Board appointed by the Governor, of which Richard E. Scammon is chairman, and Mr. Roland S. Vaile, the Federal Consultant serving under the National Resources Board. Part I is a digest and interpretation of the findings of the Board; Part II a series of committee reports.

Two auxiliary projects have been undertaken by the Board - one a county road mapping project involving the compilation of maps from data taken from official records; one the preparation of an annotated card catalogue of information on Minnesota (natural resources, people, industries, etc.), and it is urged that a perpetual inventory along the lines already started by the Board should be continued.

Proof that the State is approaching maturity, emphasizing, therefore, the desirability and necessity of planning, lies, the authors believe, in the following facts:

1. Population

Immigration into the State ceased many years ago. In spite of the low density of population, there are many evidences that Minnesota has very nearly reached the maximum population, unless some great industrial or social change takes place. The population is rapidly attaining an age distribution typical of mature communities; farm population has not increased in twenty years, and city growth has been checked because industries on which such growth depends have reached the optimum point. In the cities, the desirable residential areas of a few years ago have become the slums of today. Minnesota, therefore, considering the above points, is safe in relating its plans to a period of slow population increase.

2. Agriculture

Agriculture appears to have reached a period of stability since nearly all of the land in Minnesota economically adapted to agriculture is now in farms, and has been for the past 20 years; the index of the total quantity of 16 major farm products sold has, moreover, fluctuated but little during the past decade.

3. Forestry

Primeval forests have largely disappeared, and drought has ruined many shelter belts and woodlots. Projects under way to counteract these tendencies should be carried to completion. The condition of the forests raises the important question as to whether large forest areas should be publicly or privately owned. Forms of taxation to encourage private forestry ownership should be developed, and the matter of State vs. Federal control should have consideration.

4. Industry

The Twin Cities and Duluth have developed into mature metropolitan centers with the State and parts of surrounding states as the hinterland; have developed into processing points for raw materials, the manufacture of some articles required for consumption within the area, and have also developed as financial centers. Two early industries have reached or passed their prime - flour milling and lumbering -- all facts tending, the authors believe, to show that Minnesota has come of age.

5. Income

There has been no rapid expansion in the quantity of goods and services produced over a considerable period of time in Minnesota; the distribution of income has been more nearly uniform than in many older, more highly industrialized sections of the country; the State apparently has not reached the same stage of concentration of industrial ownership and control found in other localities.

6. Power

Minnesota has no large water power resources, but the vast resources of peat within her borders, and lignite in the Dakotas provide sources of fuel for power production. It is recommended that the State promote experiments to develop these resources, that a detailed study of power resources be made, and that the promotion of rural electrification be undertaken, and that needed legislation be fostered.

7. Transportation

The building of the "railroad plant" in Minnesota has been essentially completed, although serious problems related thereto still exist which should be studied. Highways are rapidly approaching the stage of completeness already reached by the highways; recently there has been some revival of interest in waterways. In general, however, it is apparent that Minnesota has passed the youthful state of rapid development, and the problem ahead lies in using to the best advantage the transportation structure already built.

The Need for Planning

Each of the above changes has had a cause, and teaches the lesson of the desirability and necessity of planning. "The problem of the next few decades is, therefore," the Planning Board believes, "to so marshal the productive forces of the State that the energies of the people may be used in production with at least 50 percent more effectiveness than at present. Certainly, there is nothing in the present situation to suggest an attitude of defeatism. Rather the reverse, for progress in per capita production and the attendant increase in standard of living is dependent neither on increasing population nor the discovery of natural resources not already made available in Minnesota. The demands of the future can be met by a fuller utilization of technical processes, human skills, and organizing ability by the people of this and coming generations."

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FURTHER RADIO DISCUSSIONS OF LAND PROBLEMS AND ADJUSTMENT OF INTEREST

Northeastern States

The problem of land adjustment in the Northeastern States and the withdrawal there of farm land from cultivation is no academic issue, according to A.W. Manchester, Regional Director Region I, Resettlement Administration, in a conservation day broadcast on July 7. Such land withdrawal is a process which has been going on for centuries. For some time after it began, land abandonment in some sections of the Northeast was offset by land clearing in others, so that there was no loss in total acreage. Since 1880, however, the decline has been rapid. In that year the Northeast had approximately 50 million acres of crop land; 50 years later, in 1930, the 50 million had declined to 39 million.

The principal explanation of the abandonment lies in the fact that the railroad, the refrigerator car, and other improved methods of transportation and preservation made vast new areas of easily tilled and fertile land efficient and effective contributors to the food supply of eastern cities and manufacturing towns formerly dependent largely upon local supplies.

From the human standpoint the process of abandonment is likely to be something like this: the unproductive farm yields only a meager income. The children, particularly the more enterprising, look for opportunities elsewhere. Eventually only the old people are left. As their strength wanes, they use less and less until the fields have pretty much disappeared.

Within the past year the Federal Government has come into the picture with its "submarginal land program", under which farms too poor to support farm families are purchased, stranded occupants aided where necessary in reestablishing themselves under more favorable economic opportunities elsewhere, and the lands reforested or developed for recreational uses. The program as it stands at present contemplates the purchase, roughly, of one-half million acres in the eleven Northeastern States. The lands will be handled in a way which will adequately protect water supplies and stream flow, will assure the needed supplies of high grade timber for local industries, preserve scenic beauties, provide needed recreational facilities, and adequately protect our dwindling wildlife. The present program, modest as it is in the Northeast, will at least serve to test the practicability of aiding present stranded farm populations in finding a solution of their problem through resettlement in nearby, more favored locations, and it will provide some areas which, when developed for their new uses, will be of great value to the congested populations of the Northeast.

Corn Belt

Until recent years there has never been a serious question raised with regard to the use of land in the Corn Belt, observed E.A. Norton, Acting Regional Director, Resettlement Administration, in a recent broadcast. The people who settled the area and those who now inhabit it have been industrious, enterprising, and entirely producer-minded. They have believed that the operation of individual self-interest through private land ownership would bring maximum production of wealth, sound methods of land utilization, and a wholesome country life. This philosophy was based largely on the assumption that the natural resources of the region were everlasting. Ample evidence already exists of the unsoundness of this assumption.

The reason why the Corn Belt has been among the last of the great agricultural producing regions of the country to show a need for adjustment in land use and management lies in the existance of favorable crop production factors, adequate transportation, markets close at hand, and a great wealth of natural resource in the soil. Within the last twenty years numerous farms scattered over the entire Corn Belt and located on land which maintained a relatively high level of production during the early period of its use have failed to produce an income sufficient to carry them.

There are two distinct problems in the development of a land program for the Corn Belt. They apply to different classes of land. The first problem is that of obtaining the adoption of a sound management program on the fertile or supermarginal lands which will maintain and control production, and insure the durability and permanency of the land. Much has already been done to attack this problem through experimentation, demonstration and extension. The second problem is to secure the transfer of lands from uses to which they are not well adapted to uses more conducive to the general welfare. Such land includes that of low productive capacity, and that physically handicapped, much of which should never have been broken for cultivation. Tax delinquency, land abandonment, and the loss of enough revenue to threaten the existence of local government are real questions in areas where much of this land exists.

Programs have already been initiated by the Federal Government, and by some of the States to make adjustments in the use of this land. Abandoned and cut-over land has been purchased for the purpose of reforestation. This is a step in the right direction, but these purchase programs have hardly made a dent in the problem as yet, and have not reached all the distressed areas. Man, through occupancy and development, is largely responsible for creating the problems in land use and adjustment in the Corn Belt. He can and will build a land policy which will bring the physical resources in harmony with their environment, and develop them to their highest economic and social use.

The Land Utilization Program

The general land utilization program of the Resettlement Administration was described in a radio talk by C.F. Clayton, Project Planning and Control Section, Resettlement Administration, on the conservation day period broadcast, July 19.

The first and most important resource of every nation, is, Mr. Clayton believes, the people who compose it. The composition, characteristics, and distribution of the country's population constitute the primary foundation of its prosperity. The second basic resource of a nation is land. It is precisely this simple fact that our human resources and our land resources are being seriously misused which has led to the establishment of a national program of land utilization.

For a while it seems feasible, where a country is large and endowed with resources as is ours, to ignore situations wherein land and people are subjected to deterioration and ruin, but we are beginning to see that the cost of neglecting problems of this sort must be far greater than the relatively small expenditure necessary to correct these situations. The need for action and adjustment is clear. A land utilization program should be, at first, experimental or demonstrational in character. We need to learn what adjustments can be made, what effect they will have, their benefits and disadvantages. We need to explore the relation of adjustments in the use of land to adjustments in taxation, adjustments in legislation governing the use of land for various purposes, and so on.

Further, we must recognize that a program of land utilization to be effective must be a long-time program. Under the projected program of land utilization there have been established more than two hundred fifty projects embracing nearly every State on which at least preliminary investigational work has been undertaken. In connection with these projects, it is proposed that the Federal Government acquire a considerable acreage of land with a view to devoting this land to uses for which the land is best fitted, and at the same time assisting the families occupying these lands to find better locations. In short, the projects are designed to correct misuse of our two major resources; the aim is to restore the land and the people.

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UPPER MONONGAHELA VALLEY
REPORT RELEASED

This is a summary report of the Committee of three - Oscar L. Chapman, Department of Interior, J.F. Carter, Department of Agriculture, and Richardson Saunders, Department of Labor - appointed by the President to cooperate with the Upper Monongahela Planning Council in investigating the project of joint Federal-local planning for the rehabilitation and development of the Upper Monongahela Valley, West Virginia. The committee has studied material and human resources of the region; economic and social conditions; economic and social objectives in a program of rehabilitation and development; and has proposed procedure for private-local-State-Federal cooperation in putting such a program into effect.

Summary of Findings

Ten counties in rugged northern West Virginia (Barbour, Harrison, Lewis, Marion, Monongalia, Preston, Randolph, Taylor, Tucker, and Upshur) in the area known as the Allegheny plateau and the Allegheny highlands were selected for study.

Population

In this area 340,000 people, one-fifth of the total of the State, reside concentrated largely in or near the valleys formed by the principal streams. Seventy percent of the population is classed as "rural"; 44 percent is "rural non-farm", dependent for the most part upon mining for a livelihood. Per thousand of population the Valley has about one-eighth fewer workers in the productive age group (25-44 years) than the average for the United States, and families here are 12.4 percent larger than in the Nation as a whole. Agriculture and mining account each for one-fifth of the gainfully occupied of the area.

One-sixth more native-born whites per thousand persons are recorded in this area than in the nation. Foreign born white and negro groups reside largely in the three mining counties.

Wealth

The median value of owned non-farm homes and median monthly rentals are much less in the Valley than in the United States. In 1930 the average value per farm of all farm property in this area was $5,502 as against the average for the United States of $9,103. Seventy-five out of every 100 houses used kerosene or gasoline lamps.

In 1930 the ratio of debt to value of mortgaged farms in the Valley was 22.5 percent less than in the Nation. Thirty-six percent of the farm land and 55 percent of the number of farms were tax delinquent in 1932; the average size of tax delinquent farm was 76 acres.

Industries

The peak of mine employment occurred in the Valley in 1923. Since 1927 such employment has decreased very rapidly. Since 1919 the decrease in number of manufacturing wage earners has been relatively greater than in the United States at large. In 1929 the average amount of retail sales per inhabitant in the Valley was $253 as against $400 for the Nation.

Resources

Coal, oil, natural gas, limestone, clay, building stone, sand and gravel are the principal mineral resources of the area. Water power development in large quantities is feasible. Several schemes for power development have been suggested. Flood control also is necessary.

The area contains much rough, stony land suitable for forests and grazing, and also some best suited for general farming and grazing. Because of predominating soil and topography, 56 percent of the total land area is potential forest land.

Social Conditions

Per thousand gainful workers in April 1930, there were 1/13 more unemployed persons in this area than in the country as a whole. Three-fifths of the total families in the area on relief rolls live in the three mining counties.

Ninety-two "stranded" communities exist in the area: 19 are considered to be permanently stranded; 25 apparently permanently stranded; 36 are partially stranded; and 11 temporarily stranded. Of these, 62 are dependent on mining; 23 on lumbering.

Recommendations

The committee has made several suggestions for improving social and economic conditions in the Valley:

1. The establishment of new industries, utilizing locally produced raw materials so as to conserve a larger proportion of the value added by manufacture, such industries to be financed as far as possible by local capital; to be diversified and organized to take advantage of natural resources of the area. Development of small unit (handicraft) industries. Establishment of cooperative marketing associations to market the handicraft products.

2. Development of a recreational area similar to New York's Adirondack State Park to attract out-of-state patronage; stream purification; development of artificial lakes, etc., as part of power and flood control policy.

3. Removal of miners and their families from congested coal camps to small farm homesteads easily accessible to the mines. The resettlement on farm or forest-farm homesteads of deserving farmers and their families now occupying submarginal farms.

4. Establishment of a definite educational program for the area stressing vocational and self-help education for children and adults; development of an understanding among all classes of advantages and limitations of the area.

5. As a yardstick with which to measure ability and inclination of private capital to benefit the region socially and industrially, the committee encourages the utilization of existing resources and the development of potential resources by private utility interests. Should private capital fail to avail itself of opportunities, public authority should act.

6. Establishment of agencies and small administrative personnel to demonstrate technique of regional planning through maximum utilization of local and private initiative and resources, and through coordination of Federal, State, local and private projects and activities.

Dissenting Report Submitted

Mr. Oscar L. Chapman, chairman of the committee, dissented with recommendation (5) above, concerning development of public utilities by private interests.

"It is", Mr. Chapman stated, "my sincere belief that the security, happiness, and general welfare of the greatest number of people in the Upper Monongahela Valley can best be obtained through public ownership and operation of the utilities of this area, coal as well as hydroelectric power. Past experience has demonstrated that the forces of private utility development have shown little disposition to work for the general good of the people living in this region. In consequence, it is my judgment that only by public ownership and operation of utilities can this area, in the long run, be benefitted, socially as well as industrially."

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PRODUCTION TRENDS IN SELECTED RANGE LIVESTOCK PRODUCING STATES 1900 to DATE

By

W.W. Wilcox
Division of Land Utilization
Resettlement Administration

The present abundance of agricultural products and producing facilities, it is believed, will gradually disappear as a result of the increasing demand from a larger domestic population. In the interim, land is being and will continue to be retired from crop production, both with and without governmental supervision. In general it is the land which is marginal for crop production which is being permanently or semi-permanently retired. Is it probable that this marginal crop land will be desired for pasture in the future?

A consideration of the trends in livestock numbers and feed production in the range livestock region, and the nature of the physical resources of the range, provides a part of the basis for the answer.

Since any attempt to appraise the relative demand for land for pasture in other sections of the United States must, among other things, include an analysis of probable range livestock production, data on trends are here presented for each of the States of Wyoming, Montana, and Texas. Similar data have been combined for the three States - Arizona, New Mexico, and Nevada.

Over one-half of the sheep and more than one-third of the cattle in the United States are found in the range livestock regions of the Great Plains and Western States. The number of livestock produced in these regions, and changes in their production are of vital importance, not only to the ranchers, but to the farmers in other agricultural regions. Trends in livestock production in these regions may be expected to have an important influence on beef cattle and sheep production in other sections of the United States in the future as they have had in the past. In particular, the competitive position of beef cattle and sheep production with other systems of farming, such as dairying and pork production in the Corn Belt and general farming regions, will be influenced largely by the volume of range livestock marketed.

Source and Limitations of Livestock Data

The Bureau of Agricultural Economics has recently revised its series of "Numbers of Livestock on Farms and Ranches on January 1" in the Western States. These data are available only on a State basis. In view of the limitations in availability of data for parts of States, it seemed advisable to limit the study to certain States in which the range livestock industry was particularly important. The total number of roughage-consuming animal units was computed by adding to the total number of cattle and horses one-fifth the number of sheep.

Changing Character of the Industry

During the period 1900-1935, there has been a marked shift in the character of the range livestock industry. In the early years many of the cattle were kept on the range until they were three and four years old. Now a number of the ranchers sell their stock as calves at weaning time, and most of them sell their stock when much younger than was formerly the case. This shift to the production of younger stock probably means more pounds of beef marketed for each animal unit on hand in January, and perhaps more beef per acre of land grazed. The quantitative effect of this shift has not been adequately analyzed. It appears, however, that the grazing load on the range remains in about the same relation to the number of animals on hand January 1 as in the earlier years.

Changes in the character of the sheep and wool industry have been even more pronounced. In the early years wool production received major emphasis. A large proportion of the flock on hand January 1 was made up of wethers, one year old or over, kept for their wool production. Through the years there has been a gradual shift to more emphasis on lamb production until now sheep on farms and ranches in January are almost without exception the breeding flock. The lambs come relatively early in the spring, and move to market or to the feed lot in the late summer and fall. Obviously, meat production has been increased by this change, and it appears that the grazing load on the range in relation to the number of sheep on hand in January may be heavier by around 10 percent than it was in the earlier years.

Animal units grazed on the national forests are the number for which permits were issued, and include horses, cattle, and sheep as reported by the Forest Service. Five sheep were considered the animal unit in combining the data. (Forest grazing permits are based on mature stock with no fee charged for suckling lambs, calves, or colts.) Many of the forest ranges are used for summer sheep pasture. The shift to a higher proportion of lambs in relation to mature sheep has been a factor in the reduction of numbers of mature sheep permitted on the forest ranges.

Data are not available on the weight, finish, and quality of the stock produced on the range, although the consensus of opiniom seems to be that quality has been gradually improved through the introduction of pure bred and improved sires.

Interstate movements of stock could not be checked; in the States selected it was believed to be of minor significance as compared with the total number inthe State.

Rainfall Data

Annual rainfall data were compiled from the reports of the Weather Bureau. Stations having continuous records from 1900 to date were selected in the various sections of the States, and the data combined in order to have a representative picture of changes in the annual rainfall in the State as a whole. The stations selected in each State are given in a note accompanying the figures.

Source and Limitations of Crop Feed Data

The Bureau of Agricultural Economics has recently completed a revision of its annual estimates of acreage and production of the important crops. These data were used. The total production of corn, oats, barley, tame and wild hay were converted to a feed unit basis, a pound of grain or two pounds of hay considered equivalent to such a unit.

Feed units available for the roughage-consuming animals were computed by deducting from the total feed produced a quantity sufficient to feed the hogs and chickens in the State. Feed consumption of the hogs and chickens was estimated by allowing 1,000 feed units for each hog on hand in January, and 50 feed units for each chicken. Straight line interpolation between census years was used for the years previous to the appearance of the annual estimates of hogs and chickens on farms made by the Bureau of Agricultural Economics. In some years the quantity of grain produced in the southwestern States was insufficient to provide the full 1,000 feed units per hog and 50 feed units per chicken. In such cases only the total grain produced was allocated to the hogs and chickens.

Feed units available from crops produced is but a rough indication of the amount of feed fed in any one year. Inventories of feed are carried over from one year to another, some feed is shipped into the State and other feed is shipped out. In recent years shipments of cottonseed cake into the range livestock areas has been increasing. Feed available in the form of beet pulp was not considered. Dairy cows and lambs in feed lots get a large proportion of the beet pulp which is fed locally. Although dairying and the feed lot fattening of lambs and cattle has been increasing, particularly since 1920, no deductions have been made for the feed so used. The percentage of total feed used for such enterprises is small, and is probably offset by feed shipments into the range areas. Another reason for neglecting beet pulp was the fact that an unknown proportion of it is shipped out of the State.

Feed produced on improved pastures, especially on irrigated pastures, has been used to supplement the range forage and crop feed. Although it is questionable how much more forage is produced on the unirrigated pasture land after it has been enclosed in farms than when it was unenclosed, there is probably some increase due to management. Irrigated pastures, however, produce many times as much feed as range lands; hence an increased acreage of irrigated pasture would be equivalent to increased crop production in supplementing the range forage. Statistics on irrigated land in crops are not available for 1900. Beginning in 1910 the census gives acreage irrigated and acreage of crops irrigated. It is pointed out in the census report that the data on acreage of crops irrigated is somewhat incomplete. This probably accounts for the fact that irrigated pastures appear to have decreased by over 50 percent between 1910 and 1930. (For the States of Montana, Wyoming, Arizona, Nevada, and New Mexico, acreage irrigated less acreage of crops irrigated was over 2 million in 1910, and less than 1 million in 1930.) In any event it appears that any increase in the acreage of irrigated pasture between 1900 and 1930 would account for but a negligible proportion of the feed requirements of the 7½ million animal units on hand in these States in January 1930.

Trends in States

Montana

In order that all the data might be presented in graphic form on a comparable scale, the two series of roughage-consuming animal units, those permitted to graze on national forests and total numbers in the State, were converted to a percentage basis, using 1910-1914 as the base period. Annual rainfall data were similarly reduced to a percentage form. Data on feed units available per roughage-consuming animal unit from feed crops were changed to a percentage series by dividing by the estimated total feed requirements of a roughage-consuming animal unit. It was estimated that an animal unit would require 4,000 feed units in a 12-month period. Crop land was expressed as a percentage of the total land area of the State less land in parks. By throwing all these series into the percentage form, it is possible to make direct comparisons of their annual fluctuations as well as of their trends.

LIVESTOCK UNITS, FEED PRODUCTION, AND RAINFALL IN MONTANA, 1900-1935

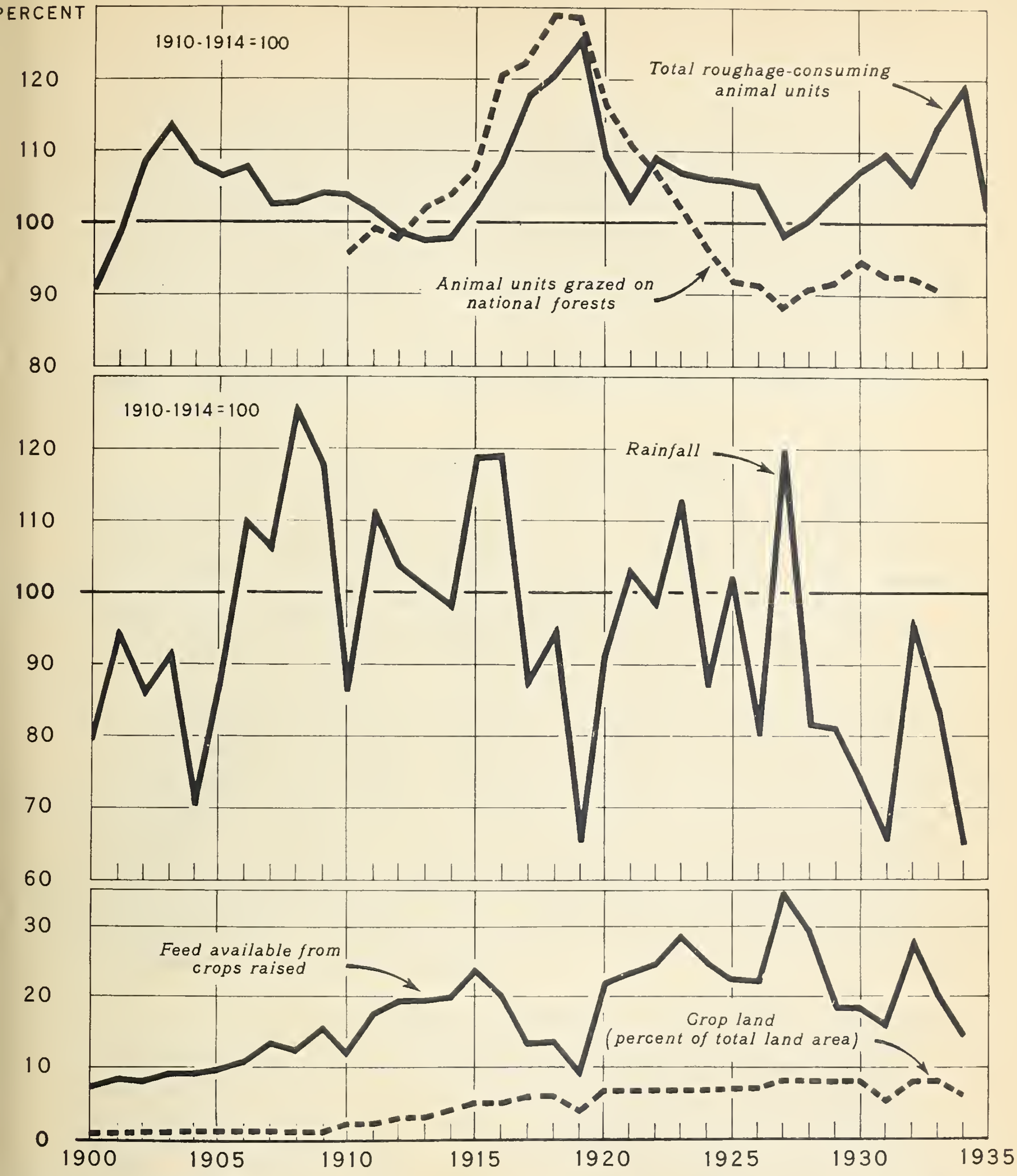

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Figure 1. Changes in the total number of range livestock in the State appear to have only an indirect relation to variations in rainfall and crop feed produced, except in the extremely dry years. Complete records of the number of livestock permitted to graze national forests have been kept since 1910. Changes in the net area of the national forests in Montana have been negligible since 1913. The annual rainfall data are an average of the observations at the following stations: Miles City, Red Lodge, Agricultural College, Dillon, Helena, Utica, Butte, Kalispell, Havre, Great Falls, Popular, and Springbrook. For an explanation of the terms and the treatment of the data, see the text.

The term "livestock" will be used to take the place of the longer phrase, "roughage-consuming animal units" in the balance of the discussion. It will be noted from Figure 1 that in 1900 livestock numbers in Montana were at their low point for the 36-year period. They reached a minor peak in 1903, and declined more or less steadily from then until 1914. From 1914 to 1919 livestock numbers increased in Montana by 27 percent. By 1927 they were back approximately to their 1914 level. Livestock numbers again increased by 21 percent from 1927 to 1934, but dropped 17 percent in the year 1934 so that estimated numbers on hand January 1, 1935 are very close to what they were in the low years, 1901, 1911-1914, 1921, 1927, and 1928.

There is no evidence of a secular decline in numbers. Neither is there any evidence of a very close relation between the annual changes in numbers and rainfall, although during several years severe drought was accompanied by a liquidation of livestock. The drought of 1919, for example, was associated with a 16 percent decrease in livestock numbers. In general, however, livestock numbers increased and decreased alternately for several years in succession, indicating an interrelationship with livestock prices.

It is apparent that the Forest Service permitted numbers of livestock grazed on the national forests to increase faster than they increased in the State as a whole from 1910 to 1919. The large numbers of animals grazed on national forests during the War period was the result of a national policy to increase food production, and was carried out against the better judgment of some Forest Service officials. Following the War they decreased the numbers permitted on the national forests even more drastically than numbers in the State as a whole declined. Since 1925 numbers permitted on the national forests in Montana have been smaller by several percent than they were in the pre-war period.

Rainfall in Montana is subject to wide annual variations. Periods of several years duration, such as 1900-1905, having an annual rainfall of 70 to 94 percent of the 1910 to 1914 average were followed by several years such as 1906-1909, with rainfall varying from 106 to 130 percent. Considering the period 1900-1934 as a whole, there appears to be very little evidence of a secular trend. If, however, 1906 is taken as the starting point, a declining trend is evidenced from 1906 to 1934. In general, the period 1906 to 1916 was characterized as a whole by more rainfall than for any other 10-year period. Likewise the period 1928-1934 was characterized by less rainfall than for any other seven-year period.

Feed available from crops raised shows an upward secular trend. Years of drought and of unusually heavy rainfall cause the annual data to fluctuate from the line of trend. It has already been pointed out that feed raised may have been supplemented, especially in drought years, by feed shipped into the State. It is also probable that hay and grain were carried over in the good crop years. It appears that feed available from crops raised may have increased in an amount equal to about 15 percent of the feed requirements of the range livestock in the post-war years as compared with the pre-war years.

Crop land has never accounted for as much as 8 percent of the total land area in the State. The increase in crop land, though fairly constant, amounted only to about 5 percent, when the post-war and pre-war years are compared.

Wyoming

Livestock numbers in Wyoming reached a relatively high level in 1909 as a result of continuously increasing numbers of sheep for the several preceding years. This 1909 peak was followed by a decline of 31 percent in livestock numbers, the low point being reached in 1912. (See Fig. 2 ff.) The war period was accompanied by a 37 percent increase, culminating, as in Montana, in 1919, followed by a 40 percent decline to another low point in 1924. The increase in numbers from 1924 to 1934 was 24 percent. It is evident that livestock numbers have fluctuated more widely in Wyoming than in Montana, and that here again it is only in the exceptional year that the amount of rainfall can be definitely associated with the change in livestock numbers. When numbers are at a high level, a definite decline follows a year of markedly below average rainfall. The wide cyclical fluctuations make it difficult to determine whether or not there has been any tendency toward a secular decline in numbers. Any declining trend must be relatively slight.

Numbers of livestock permitted to graze on the national forests in Wyoming also fluctuated, but increased rather steadily from 1910 to 1918. With the exception of the year 1920, livestock on the national forests were not sharply reduced until 1924. Since that time they have been maintained at approximately the 1910-1914 levels.

Rainfall is highly variable in Wyoming. It is significant that the 11-year period 1920-1930 is characterized by the highest average rainfall and the smallest number of livestock for any similar period in the 36 years under consideration. Paradoxically, livestock numbers increased 22 percent in the years 1930-1934,

LIVESTOCK UNITS, FEED PRODUCTION, AND RAINFALL IN WYOMING, 1900-1935

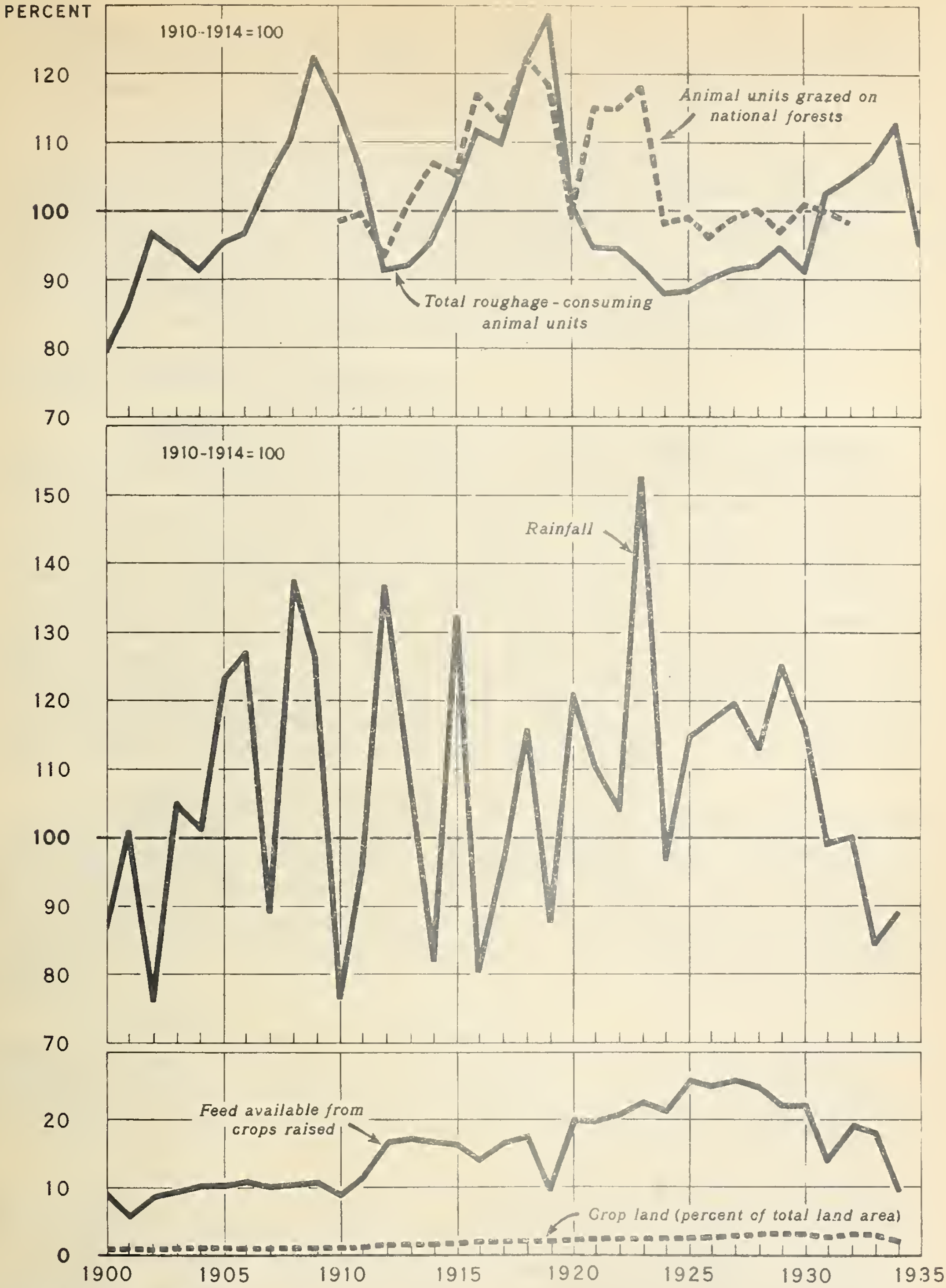

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Figure 2. Although the trends of the various series show the same general relationship in Wyoming as in Montana, they differ in detail. Animal units grazed on the national forests in Wyoming have been somewhat better maintained in relation to 1910-1914 numbers than in Montana. This may in part be accounted for by the higher relative level of rainfall in post-war as compared with pre-war years than in Montana. Changes in the net area of the national forest since 1911 have been negligible. The annual rainfall data are an average of the observations at the following stations: Border, Lander, New Castle, Pathfinder, Laramie, and Rawlins.

with lower rainfall in 1931, 1932, and 1933 than for any three consecutive years since 1904. There does not appear to be a secular trend in rainfall for the period as a whole.

Feed available for range livestock from crop production increased almost steadily until 1930. This increase in crop feed available amounted to from 10 to 15 percent of the yearly feed requirements of the livestock when comparing the post-war period with the pre-war period. Crop land expressed as a percentage of the total land area of the State less land in parks is indeed small. At no time was more than 4 percent of the land in crops.

Arizona, Nevada, and New Mexico

Numbers of livestock in the three States of Arizona, New Mexico, and Nevada increased almost steadily from 1900 to 1908, declined a little from 1908 to 1911, and then resumed their upward trend, reaching a peak in 1917. This peak was several percent higher relative to the 1910-1914 base than the similar peaks reached in Montana and Wyoming livestock numbers. Numbers did not decline quite as rapidly as they did in the other two States, but an almost continuous decline was registered until 1929. Not only was the 1917 peak unusually high, but the 1928 trough was unusually low. From 1929 to 1934 livestock numbers were roughly 90 percent of the 1910 to 1914 average. Even at this level, however, they were somewhat higher than for the six-year period 1900-1905.

Livestock permitted to graze on the national forests increased sharply in conjunction with increases in the States as a whole up to 1918. Since 1918 the Forest Service has reduced the numbers permitted to graze on the national forests even faster than they declined in the States as a whole. By 1929 only 70 percent as many livestock were permitted on the national forests as in 1910 to 1914.

Rainfall in the three States of Arizona, New Mexico, and Nevada is highly variable, as is the case in the other Western States. Years of relatively high rainfall and years of relatively low rainfall follow each other without any apparent regularity.

Feed available from crops raised for the range livestock in these States was very small. Starting from a low of 6 percent of the total feed requirements available from feed crops in 1900, there was a gradual increase up to 10 percent in 1929. Less than one percent of the total land area of these States was devoted to crop production in any year.

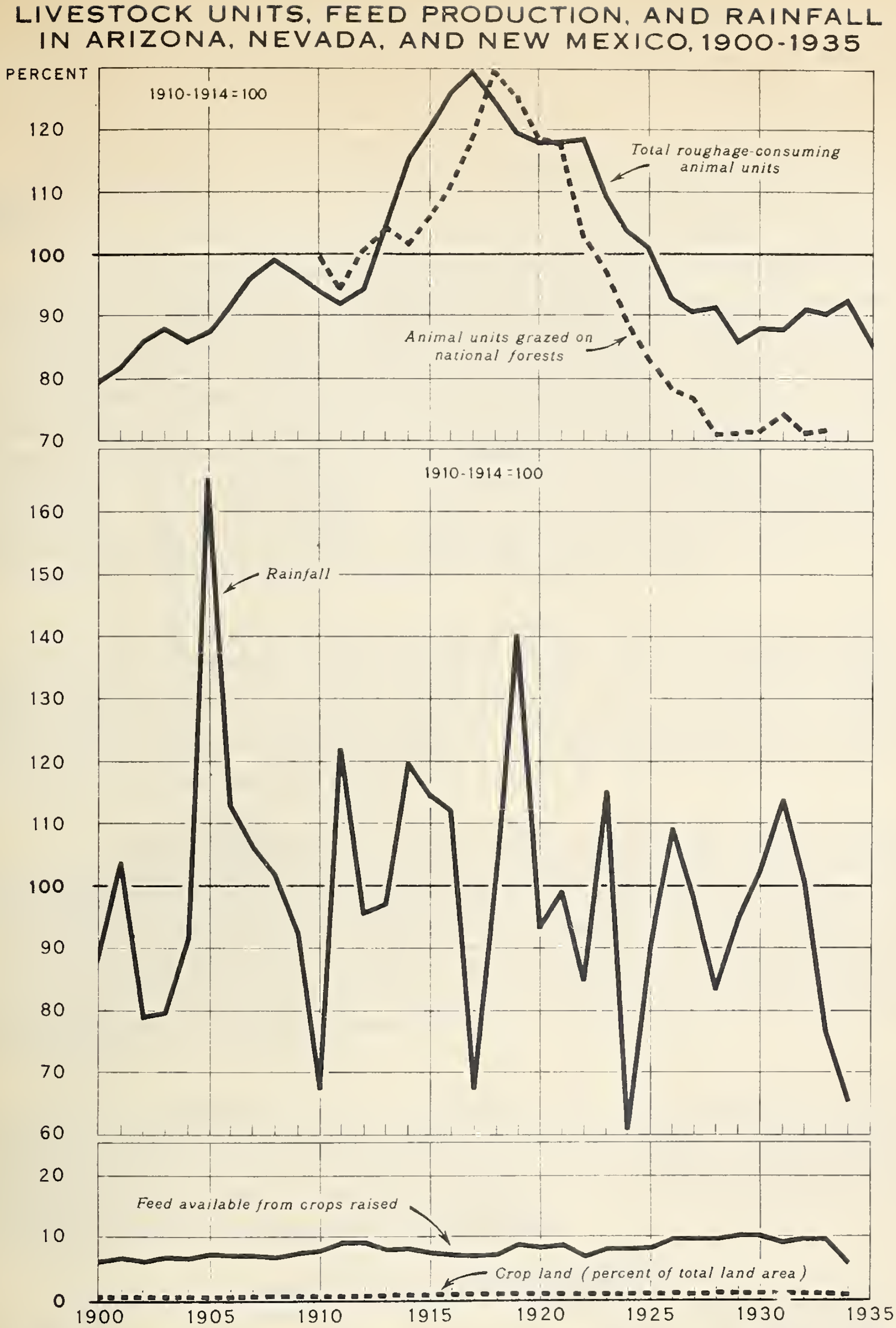

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Figure 3. The war time peak in livestock numbers in these three States was higher in proportion to pre-war numbers than in Montana and Wyoming. They were also maintained for a longer period of years, but since 1925 declined almost to pre-war levels. The net area of the national forests in these three States has been reduced by approximately 9 percent since 1913. Livestock numbers permitted to graze on these forests have been materially restriced since 1921 in an effort to get down to a permanent carrying capacity basis. Feed available from feed crops has changed but little, and crop land represents less than 1 percent of the total land area of the States. The annual rainfall data are an average of the observations at the following stations: Mesa, Phoenix, Pinal Ranch, University of Arizona, Flagstaff, St. Michaels, and Prescott, Arizona; Reno and Winnemucca, Nevada; Albuquerque, Las Lunas, Santa Fe, Bell Ranch, Las Vegas, Roswell, Fort Stanton, Agricultural College, and Lordsburg, New Mexico.

Texas

Livestock numbers were relatively high in Texas at the turn of the century. By 1902 they had reached a peak which has not been equalled since. From the high point of 134 percent of the 1910-1914 base they declined to 96 in 1913. The wartime peak was relatively low -- 117 percent in 1915-1916 followed by a moderate slump in 1917 and 1918. Livestock numbers recovered and remained at relatively high levels 1920-1923, and then in 1928 declined to the lowest point in the 36-year period. From 1928 to 1934 they increased rapidly, reaching a peak in 1934 higher by 2 percent than during the war. Liquidations in 1934 amounted to 19 percent, bringing numbers back to 1910-1914 levels.

An average of the annual rainfall at 10 stations in the western part of Texas indicates that while it is somewhat higher than in the States previously considered, it is fully as variable. There appears to be a little closer relationship between livestock numbers and annual rainfall than in the other States, but it is still far from a close relationship.

Feed available from feed crops grown, although showing an upward secular trend, is much more variable than in the other States considered.[1] This is probably due to the lesser importance of irrigated crop production in Texas. The relatively high proportion of the total land area in the State in crops may be accounted for by the cotton production as well as the wheat and feed crops raised. The increase in the crop land was, to a large extent, at the expense of the better range pasture.

A comparison of the trend of livestock numbers in Texas and the other relevant data with the similar data for the public domain States indicates that numbers have not been maintained any better in Texas than elsewhere. This is in accord with the observations of range management specialists.

Qualitative Interpretation

What meaning or significance can be attached to these trends?

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[1] The feed crops in Texas included grain sorghums in addition to corn, oats, barley and hay.

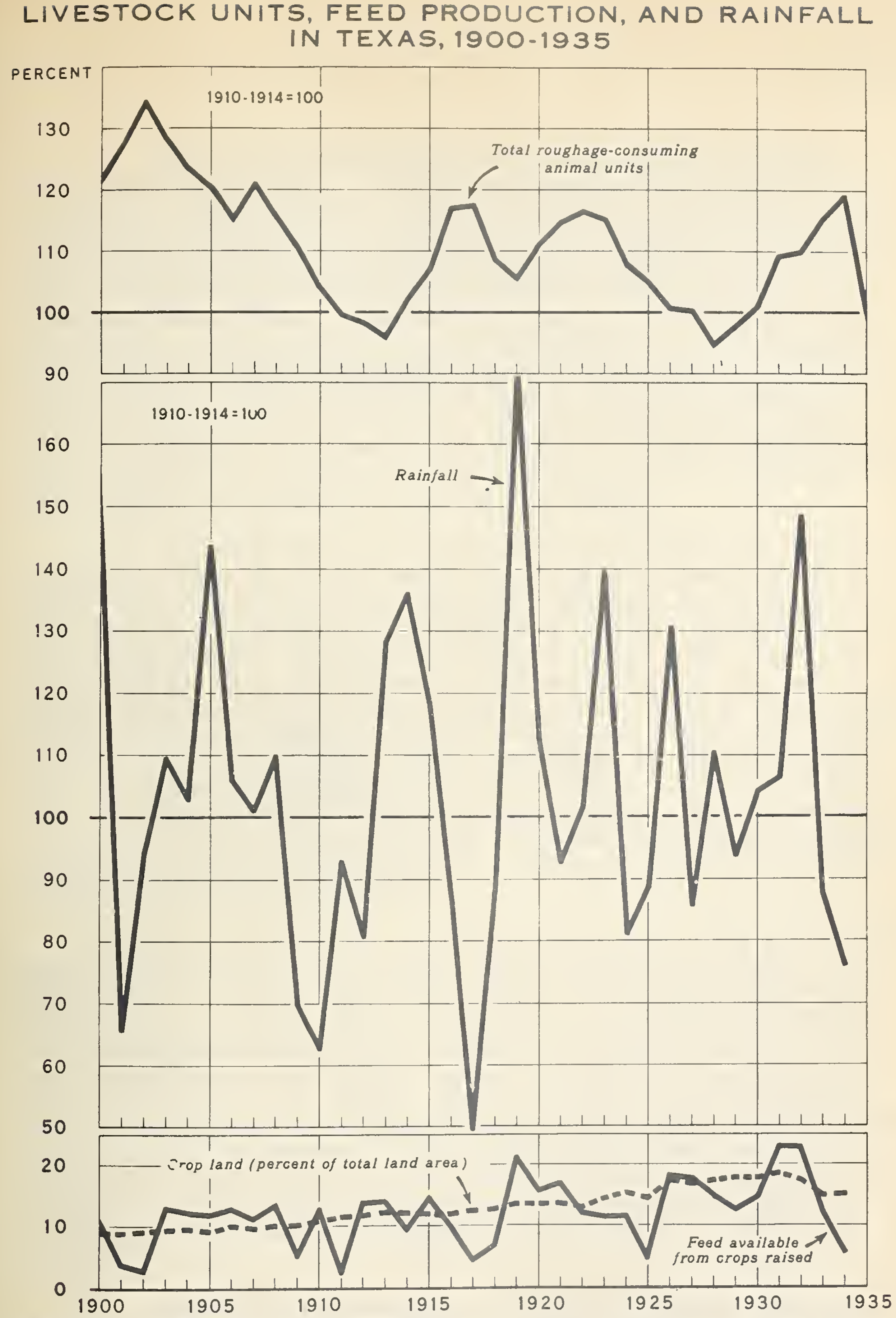

Figure 4. Unlike the public domain States, livestock numbers in Texas were at a relatively high level 1900-1905. The war time peak was low, and the 1934 peak high as compared with the other States. Feed available from crops raised has shown a slight upward trend. The annual rainfall data are an average of the observations at Big Spring, Crosbyton, Plainview, El Paso, Fort Clark, Fort McIntosh, Abilene, Fort Worth, Austin, and San Antonio.

Most of the accumulated feed of the range country had been grazed off by 1890. Droughts in the 'nineties caused stock losses and reduced numbers on the range similar to the more recent droughts. David Griffiths' writing in 1901 speaks of over-grazing being rather general, and especially bad in southern Arizona.[2] While the range was probably fully stocked by 1890, lack of water in certain areas made it impossible to graze off the forage. The development of water holes and the utilization of forage farther away from the natural watering places has been a gradual result of competition for a limited amount of forage. Just how important this has been in the bringing into use of new range land since 1900 is difficult to estimate. Men familiar with the range country are not inclined to estimate the increased range made available since 1900 by such methods at a very high figure.

The shifting of the range livestock industry to the production and sale of younger animals has been discussed earlier. It seems questionable as to how this change affected the ratio of the grazing load on the range to the number of animals on farms and ranches in January. Probably any change has been very slight. The feed available from crops raised is but an indication of a trend toward the utilization of more hay and grain to supplement the range forage. It is probably a very good indication, however, for taking the States as a whole, only a small percentage of the total feed used is shipped either into or out of the State. Much of the grain and concentrates shipped into the range country is used to fatten the stock or to put the young stock in better flesh before shipping them to the Corn Belt rather than for wintering stock to be run on the range the following summer.

It seems probable that feed production for the wintering of range livestock has increased from 1900 to 1935 to the extent that approximately 10 percent more than formerly of their annual feed supply is now received from this source. The southwestern States and Texas have increased hand feeding only slightly in so far as corn, oats, barley, and hay are concerned, but have increased somewhat the feeding of cottonseed cake. How much of this cottonseed cake is used to supplement range forage, and how much is used in the feed lots is problematical. The northern States have probably increased their hand feeding by an amount equivalent to slightly over 10 percent of the yearly ration. Land taken out of the range for crop production probably offsets this to the extent of about two percent.

The relative maintenance of livestock numbers in these range States over the 36-year period does not mean that the quality

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2/ "Range Improvement in Arizona", by David Griffiths. U.S. Department of Agriculture, Bureau of Plant Industry, Bulletin 4.

and quantity of range forage has been fully maintained. In view of the wide cyclical fluctuations in the livestock numbers on the range, it is apparent that current rate of stocking has little relation to long-time carrying capacity. Current reports indicate that range depletion and deterioration has been general over most of the range country. The continuation of large numbers of stock on the range in spite of reports of the disappearance of the more desirable forage plants suggests the hypothesis that the decline in the quantity and quality of forage, although going on through the years, has not yet been sufficiently serious actually to reduce the rate of stocking.

Progressive reduction in the quality and quantity of forage plants on the range must eventually make itself felt in total numbers of livestock grazed in these States. Roughage-consuming animal units in southern Iowa and northern Missouri, a farming country which has been pastured much longer than the range, have been declining at an increasing rate since 1900. The rate of decline in the decade 1920 to 1930 was more than twice as rapid as the decline during the decade 1900-1910. Approximately one-half of the farm land was in pasture, mostly permanent. That declining pasturage has been an important factor influencing the decline in livestock numbers seems evident from the reports of pasture shortage in this area in recent years.

Natural conditions are more conducive to pasture deterioration in southern Iowa and northern Missouri than in the range country. For that reason the trends shown in Figure 5 (ff) are not expected to be duplicated in the Western States. They areindicative of what has happened in an older, more productive area, however.

Future changes in the age and quality of livestock marketed from the range are likely to be less than the changes taking place since 1900. Particularly, there seems little possibility of any material increase in the efficiency in meat and wool production through changes in the age of marketing. The National Resources Board reports 7 million acres additional irrigable area with estimated costs of reclamation of $100 an acre or less in the seventeen Western States.[3] Irrigated land increased by over twice this amount from 1900 to 1930 without increasing feed available for the range livestock by more than approximately 10 percent. For this reason it does not seem probable that increases in irrigation may be expected to figure heavily in maintaining or increasing range livestock numbers in the future.

Numbers of livestock permitted to graze on the national forests are now smaller than they were in 1910 to 1914. It is

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[3] National Resources Board Report, Part II. Report of the Land Planning Committee, p. 129, Table 9.

TOTAL ROUGHAGE-CONSUMING ANIMAL UNITS, PASTURE AND WOODLAND IN SOUTHERN IOWA AND NORTHEAST MISSOURI

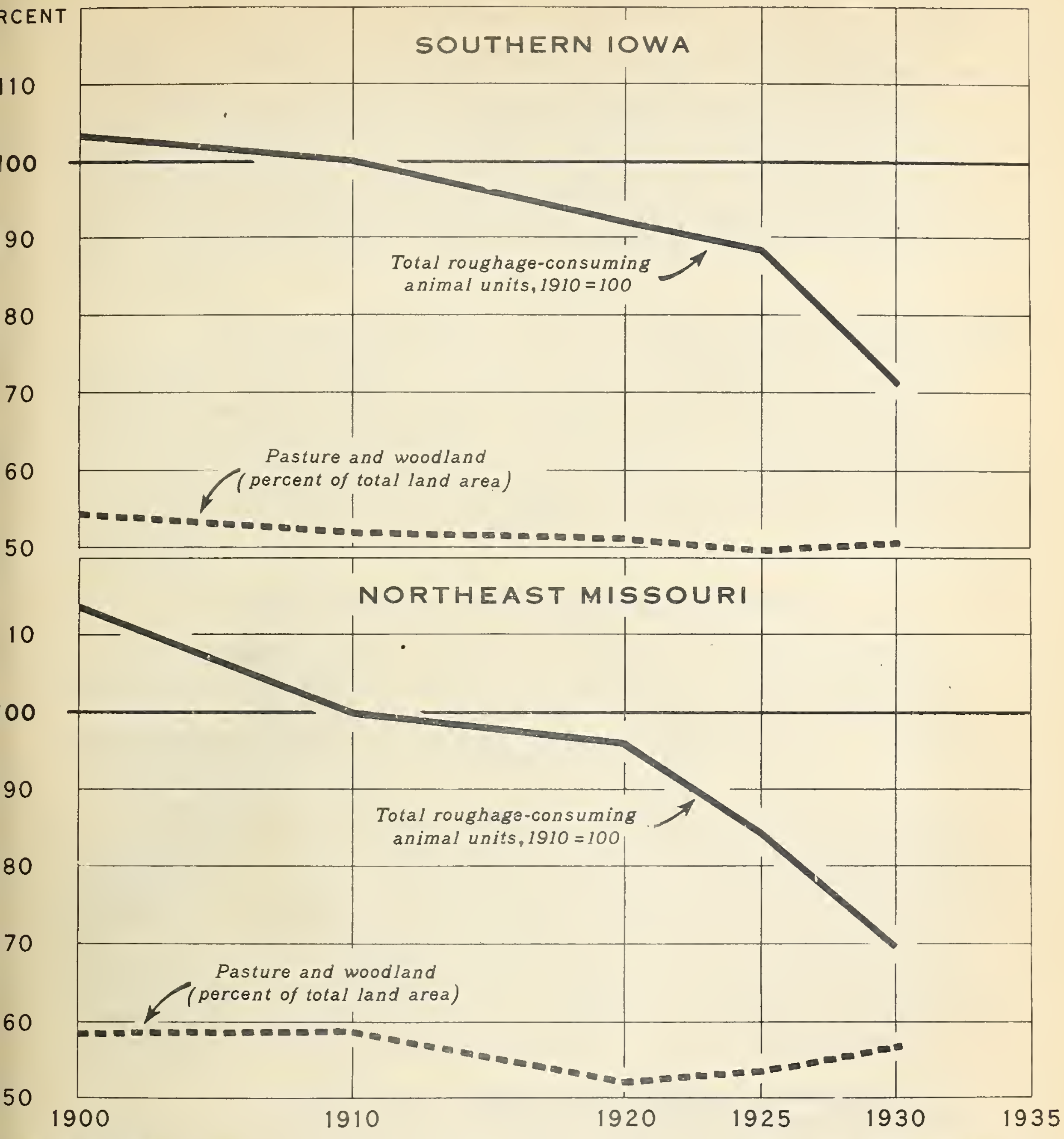

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Figure 5. Livestock numbers have been declining since 1900. Animal units are in terms of percent of census numbers in 1910 adjusted to a January basis for those years when the census was taken at another date. Pasture and woodland is given as a percent of total land in farms in 1910. Pasture and woodland can be separated in the more recent census tabulations, but not in the earlier ones. Pasture accounted for over 80 percent of the total land under the combined heading "Pasture and Woodland" in these counties in 1930. The counties included are: Appanoose, Clarke, Davis, Decatur, Des Moines, Henry, Jefferson, Lee, Lucas, Monroe, Van Buren, Wapello, Wayne, and Ringgold in Iowa; Adair, Clark, Daviess, Grundy, Garrison, Knox, Lewis, Linn, Macon, Mercer, Putnam, Schuyler, Scotland, and Sullivan in Missouri.

recognized that the Forest Service permitted overstocking of their ranges as a temporary war measure, 1915 to 1919. Reduction in numbers in the 15 years since the War, together with management of the ranges has resulted in material improvement of the forest ranges as compared with the public domain, but has not resulted in sufficient improvement to permit increasing the rate of stocking. Numbers of livestock permitted to graze on the national forests even before the 1933-34 drought were still showing a downward trend, and it is reported that they will be further reduced as a result of the drought.

A careful consideration of all these pertinent facts leads to the conclusion that probably the rate of stocking the range for the period 1925 to 1935 as a whole was in excess of its long-time carrying capacity even under management. This is almost surely true of the period 1930-1935. If this be true, then management of the range and the prevention of soil depletion is needed to conserve the present resources, and to make it possible over the longer period of time to maintain livestock numbers as nearly at present levels as possible.

Significance in Regional Land-Use Planning

Farmers change their farm production plans slowly. Adjustments in land use come about gradually. Regional land-use planning and the adoption of governmental policies to effectuate regional adjustments in the use of land recognize this. Planning and policies are adopted today looking toward tomorrow.

Since the range country is such an important livestock producing area, a probable decline in the rate of production is of great significance. Assuming the demand for beef and lamb to increase with population over the next twenty years, more production, not less, will be demanded. It seems apparent that policies and long-time plans for land-use adjustment in other agricultural regions of the United States should take into account the fact that they will have an opportunity to contribute a larger proportion of the nation's beef and lamb than has been true in recent years.

It seems evident further that efforts to conserve resources in conjunction with efforts to control production in the years immediately ahead will be well repaid, if ways and means are explored to reduce further and hold down to conservative levels the number of livestock on the range.

If the conclusions reached in this analysis are sound, pasture land in other sections of the United States may be expected to increase in economic value relative to their physical productive capacity and the placing of any potentially productive pasture land to other less productive uses should be seriously questioned. Evidence of the declining productivity of pastures in the humid sections of the United States (not reviewed here) further substantiates the conclusion that an increasing demand may be expected for lands adapted to forage production during the next 25 years.

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RECENT PUBLICATIONS AND ARTICLES

Periodical Articles

"Land Resources: The Taylor Grazing Act". Virgil Hurlburt. JOURNAL OF LAND AND PUBLIC UTILITY ECONOMICS. XI (2) 203, May 1935.

There has never been a law to meet adequately the needs of the stock farmer of the Great Plains, since the fundamental policy running through our past land laws has been the creation of a large number of farm homes by the transfer of public domain to private ownership, the author believes. "In several Western States", moreover, "over half the total land area has been homesteaded", and "with but few exceptions, one being lands in reclamafion projects, the size of tracts granted has been too small."

If the arid and semi-arid lands were owned by resident stockmen in units sufficiently large, there would probably be no need for regulation, but the "hit-and-miss", checkerboard pattern of land ownership has made some method of range control necessary, and this control the Taylor Act hopes to supply.

In commenting on the significance of the Act, the author notes that only one of the provisions, the establishment of the grazing district, is new. Permit issuance follows the practice of the Forest Service; recognition of preference is a policy found throughout national land laws; the leasing feature is only a wider application of the principles followed in use of mineral lands; while the exchange of lands between Federal and State governments has been going on for many years.

Public Attitude

In attempting to make an appraisal of public attitude toward the Act, the author concludes that there is opposition, but that the livestock industry favors the act in so far as its provisions favor individual ranchmen, but until the range has been much improved, no fees can be paid for grazing privileges. Immediate improvement is recommended through CCC or PWA projects.

"Population Movements in Canada 1921-31". Hurd, W.B., and Cameron, J.C. CANADIAN JOURNAL OF ECONOMICS AND POLITICAL SCIENCE 1(2) 222. May 1935.

An attempt was made, in an earlier paper by W.B. Hurd entitled, "Population Movements in Canada 1921-31 and their Implications", "to isolate certain major population movements in Canada during the last intercensal decade, and to demonstrate their bearing on the current situation in and the future outlook for, the country as a whole." Provincial data available subsequent to the appearance of the first article have made possible the elaboration of the preceding analysis.

Part I summarizes the findings: (1) a net rural-urban movement amounting to about 437,000 all ages occurred in Canada 1921-31; the cityward migration being heavier in eastern Canada where birth rates are high and in the maritimes, where rural employment generally declined. Very probably surplus rural population will be very much larger during the present decade, especially in provinces with high birth rates. (2) In June 1931 the estimated number of urban residents economically unassimilated exceeded the net rural-urban movement for the decade by twice or more. Assuming a rural surplus of the same moderate dimensions as in the last intercensal decade, an estimated minimum expansion of 45-50 percent in urban employment would be required in the current decade to absorb the expected rural excess in addition to the normally accruing urban natural increase, and the survivors of the urban residents who were unemployed at the beginning of the decade. (3) During the last decade radical change has taken place in both geographical and rural-urban immigration distribution; net immigration was predominantly urban, but both rural and urban immigration were predominantly to eastern Canada. (4) For every province both rural and urban net immigration from abroad included disproportionate percentages of males.

"The evidence of this regional study confirms the conclusion that a migrating population, whether male or female, Canadian or foreign-born, consists for the most part of young adults at the most productive ages, and consequently, of the economically most important sections of our population."

"The Flight from the Fields", Sir Daniel Hall. NINETEENTH CENTURY AND AFTER. 117 (699) 533.

Census figures for the last 60 years for England and Wales show a continuous decline in the numbers engaged in agriculture. While the number of independent farmers has been maintained relatively constant throughout the entire period, the number of employees (laborers on a weekly wage) declined at the rate of about 10,000 a year except during the decade 1901-11. From 1871-1931 numbers shrank 48 percent, and the area of cultivated land shrank about 1,000,000 acres, or 4 percent.

The author concludes by saying, "... the decline in the number of men employed upon the land has, within the last 60 years, been very great; at the same time the small farms have been diminishing in numbers, in spite of the legislative attempts to restore them. The small mixed farm has become definitely uneconomic in Britain, as in most Continental countries, and every year of progress, every invention of science and machinery, increases the efficiency of the large farm as compared with the small. Further employment upon the land is to be obtained, not by a return to earlier conditions of subdivision, but by an intensification of the methods of production on larger units of cultivation..."

"The German Back-to-the-Land Movement". Karl Brandt. JOURNAL OF LAND AND PUBLIC UTILITY ECONOMICS. XI (2) 123. May 1935.

The writer sketches briefly but adequately the movement from farm to city in Germany followed more recently by the back-to-the-land movement, analyzing the reasons for both movements. The city became obviously unable to live up to its responsibilities, with unemployment and the dole appearing as two results. The people, the author says, "went to the country to escape the destiny of degradation", where "they could create something with their labor to supply their own needs."

The gradual change of attitude of the entire nation toward the agrarian population is also described. Farmers are now "a superior class and superior stock to whom destiny has entrusted more vital interests than to any other group."

Books and Bulletins

Books

Mackintosh, W.A. PRAIRIE SETTLEMENT: The Geographical Setting.
Dawson, C.A. THE SETTLEMENT OF THE PEACE RIVER COUNTRY.

The Canadian Pioneer Problems Committee has sponsored nine volumes on Canadian frontier settlement, covering settlement in Canada during the 20th century, especially on the Great Plains. The above are two of the series, and have been very briefly reviewed by Loyal Durand Jr. in the JOURNAL OF LAND AND PUBLIC UTILITY ECONOMICS XI (2) 207 for May 1935. Macmillan Company of Toronto are the publishers.

Bulletins

Report of the Committee on the Upper Monongahela Valley West Virginia to the Secretary of Interior. 1935. Mimeographed. (Reviewed elsewhere in this issue.)

Report of Minnesota State Planning Board. St. Paul. 1935. (Reviewed elsewhere in this issue.)

"Land Redemptions." "Effect of Proposed Homestead Exemption". From STUDIES OF LEGISLATIVE PROBLEMS IN ALABAMA, by Committee on Government Research, Bureau of Business Research, University of Alabama. Mimeographed series No. 5, Pt. 2.

The report on land redemptions is concerned especially with the problem of returning to the tax rolls real estate which the State of Alabama has acquired at tax sales, and is based on the assumption that permanent reform rather than temporary relief is to be desired. The nature of the causes of tax delinquency have been studied, as well as the extent of the problem of land redemptions.

One part of the report consists of a summary of the legal provisions of the various States covering tax delinquency, sales, and redemptions; another discusses the extent of the problem in other States; a third is a summary of growth and present status of the problem in Alabama. The conclusions, occupying part 4, are of interest. (1) Alabama legal provisions affecting tax delinquency, sales tax and land redemptions are in line with those of other States; (2) tax delinquency in Alabama is relatively moderate; (3) non-uniformity of tax delinquency among counties may have several explanations:

(a) large amounts of marginal land - is continuation of private ownership desirable; if not, how should State use land;
(b) inequitable assessment;
(c) government costs are too high; county consolidation, more State aids, etc., may be necessary here.

The large number of periodically recurring delinquencies, though unimportant in total value, is a symptom of grave defect in fiscal policy and administration of State tax laws.

A final section concerns the proposed homestead exemption and its probable effect on tax revenues, with Tuskaloosa County used as an example. Homestead exemption with $1200 amount limitation is estimated to bring about a decrease in ad valorem taxes in Tuskaloosa County of 18.12 percent; for the city of Tuskaloosa as much as 20.19 percent.

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LEGISLATION AFFECTING LAND USE

Congressional Activities

Following is the status of the chief bills affecting land utilization at the close of the first session of the 74th Congress, August 26:

Public 320 (H.R.8492) amends the Agricultural Adjustment Act. Approved August 24, 1935.

S.2367 to establish the Farmers' Home Corporation to aid in providing farms for tenants and share croppers, has been passed by the Senate, and is now in the House Committee on Agriculture.

H.R.3019 to amend the Taylor Grazing Act has passed both Houses with amendments, and awaits the President's action.

H.R.6914, to aid the States in acquiring land for State forests, as amended by the Senate, has been adopted by the House, and has gone to the President.

H.R.8632 to amend the Act creating the Tennessee Valley Authority. Conference Report adopted by both Houses August 21, 1935.

AGRICULTURAL ADJUSTMENT ADMINISTRATION

Public 320 (H.R.8492) Amends the Agricultural Adjustment Act. As finally adopted Section 32 is retained, which appropriates 30 percent of the gross tariff receipts for (1) benefit payments for the export of agricultural goods; (2) benefit payments to encourage domestic consumption; and (3) to finance adjustments in production.

See also SUBMARGINAL LAND RETIREMENT.

GOVERNMENT REORGANIZATION

S.2665. To change the name of the Department of the Interior to the Department of Conservation and Public Works, and to authorize the transfer of agencies dealing with conservation work to that department by executive action, subject to the approval of Congress. Reported favorably by the Senate Committee on Public Lands. Action postponed until next session.

S.3288. To provide for the consolidation of the Branch of Forestry in the National Park Service in the Department of the Interior; the Bureau of Agricultural Engineering, Forest Service, and Soil Conservation Service in the Department of Agriculture; the Forest Division of the Tennessee Valley Authority; the Civilian Conservation Corps camps of the TVA, the Emergency Conservation Work, (an independent establishment) the Civilian Conservation Corps camps in the Departments of Agriculture and Interior and Civilian Conservation Corps camps conducted jointly by the States and the Federal Government and all other CCC camps and soil erosion activities of all departments and independent agencies in the Bureau of Forestry of the Department of Agriculture.

GRAZING ADMINISTRATION

See PUBLIC LANDS.

INDIAN LANDS AND ADMINISTRATION

S.2803. To authorize the sale of restricted lands between Indians and the conveyance of restricted lands to corporations for public purposes.

IRRIGATION AND RECLAMATION

H.R.8492. To amend the Agricultural Adjustment Act. An amendment to provide that where there exists in any Federal reclamation projects submarginal lands against which there are obligations to the Federal Government, such submarginal lands may be eliminated from such projects, and any reclamation charges against such land be cancelled. Adopted by Senate, but eliminated in conference.

LAND ACQUISITION

S.3250. To prohibit the acquisition by the United States of any land located in any State without the consent of such State.

LOCAL GOVERNMENT

S.3234. To provide for the payment to each municipality, county, parish, township, unincorporated tax or special assessment district, school, drainage, irrigation, reclamation, levee, sewer, paving, sanitary, port, improvement or other district in which lands in private ownership have been or are hereafter acquired by the United States, an amount bearing the same proportion to the indebtedness of such taxing district outstanding at the time of acquisition as the value of the lands so acquired bore or bears to the value of all the lands in the taxing district.

NATIONAL FORESTS

H.R.8785. To authorize the exchange of National Forest land for privately owned land and the transfer of public owned lands to National Forest status in an area comprising 207,000 acres adjacent to the Willamette National Forest, Oregon.

Public No. 227. (H.R.3061). To extend the boundaries of the Chelan National Forest, Washington, a distance of four miles from their present location, and to authorize the transfer of public lands within the added area to the National Forest and the exchange of privately owned lands for National Forest land or timber. Area affected is 383,000 acres. Approved August 2, 1935.

S.3321. To add one section to the Mount Hood National Forest, Oregon.

See GOVERNMENT REORGANIZATION.

NATIONAL PARKS

S.Res.102. To direct the Committee on Public Lands to investigate the advisability of establishing additional national parks and monuments and proposed changes in boundaries of existing parks. Passed July 30, 1935.

S.739. To provide for the establishment of a national monument on the City of Fort Stanwix, New York. Passed Senate, 7-29-35; House 8-14-35.

S.997. To provide for the establishment of a national monument on the estate of Patrick Henry, Red Hill, Virginia.

Passed Senate 7-29-35; House 8-6-35.

H.R.4507. To provide for the establishment of the Appomattox Court House National Historical Park, Virginia. Passed House, 6-5-35; Senate, 7-29-35.

S.32. To provide for the establishment of a national military park at Saratoga, New York. Passed Senate, 7-30-35.

H.R.5368. To provide for the enlargement of the Chalmette National Monument, Louisiana, and for its establishment as the Chalmette National Historical Park. Passed House, 7-15-35.

See SUBMARGINAL LANDS.

PUBLIC LANDS

Public No. 222 (S.1065). To further extend the time in which final proof may be offered by homestead and desert land entrymen. Approved 7-26-35.

H.R.3019. To amend the Taylor Grazing Act to provide that:

(1) 142,000,000 acres of public lands may be placed in grazing districts.

(2) Authorizes classification of public lands and opens those more valuable for agriculture than grazing to entry in tracts of 320 acres.

(3) Authorizes acceptance of gifts of land within grazing districts and exchange of publicly owned lands without for privately owned lands within such districts.

(4) Directs that Secretary of the Interior shall proceed as rapidly as possible with exchange of State owned lands within for publicly owned lands without grazing districts. Reduces fees for same.

(5) Authorizes leasing of isolated tracts in unrestricted amounts.

(6) Grants to the States all vacant, unappropriated and unreserved non-mineral lands in tracts of 760 acres or less which at the expiration of two years after adoption of this Act are not included within grazing districts or leased. Passed House and Senate.

Public 285. To repeal the provisions of the homestead laws requiring cultivation of land. Approved 8-19-35.

RECLAMATION

S.3292. To provide for the establishment of the Mid-Continent Reclamation Commission to impound, conserve, and make use of the unappropriated waters of the eastern slope of theRocky Mountains.

STATE FORESTS

H.R.6914. To provide for cooperation with the States in the acquisition, development and administration of State forests, and to authorize the appropriation of not to exceed

$5,000,000 for this program. Passed both houses and sent to the President.

SUBMARGINAL LAND RETIREMENT

Public 320. (H.R.8492) To amend the Agricultural Adjustment Act. Section 55 makes available from Work Relief funds such amount of money "as the President may allot for the development of a national program of land conservation and land utilization. The sums so allotted may be used ... for the acquisition of submarginal lands and their use for such public purposes as the President shall prescribe."

H.R.3019. To amend the Taylor Grazing Act. Amended by the Senate to authorize the President to include in the proposed Badlands National Monument certain lands which are designated by the Resettlement Administration as submarginal.

H.Res.358,359. "To further the development of a national program of land conservation and utilization." Would authorize the appropriation of $50,000,000 for the acquisition and retirement of submarginal agricultural land. For all lands so acquired taxes would be paid to the political subdivisions in which they are located at the rates previously assessed, but authority for reducing assessments is given. (This measure was offered as an amendment to H.R.8492, but was dropped in favor of the substitute above mentioned.)

TENNESSEE VALLEY AUTHORITY

H.R.8632. To grant certain additional powers to the Tennessee Valley Authority. Conference report agreed to 8-21-35, and bill sent to the President.

State Legislative Activities

FLORIDA

H.B.163. Provides for the creation of county delinquent tax adjustment boards and boards of appeals, and for the compromise and adjustment of tax sales certificates held by the State. Approved.

H.B.115. Provides for redeeming tax delinquent lands. Approved.

S.B.163. An Act prescribing the method by which tax delinquent lands may be sold and the deeds obtained. Approved.

S.B.561. Authorizes the Florida Board of Forestry to acquire by gift, donation, purchase or otherwise from the Federal Government or private individuals lands suitable for State Forests or Parks, and appropriates $100,000 for the purchase, development and management of such lands for the next biennium. Approved.

S.B.955. Appropriates $25,000 for expenses of the Everglades National Park Commission. Approved.

S.B.956. An Act setting aside a portion of the area contained in the proposed Everglades National Park for a wildlife refuge and wilderness area. Approved.

ILLINOIS

H.B.1146. To authorize the Department of Public Works to accept transfer by patent from the United States, such right, title or interest as may be granted to lands that are to be used for parks, and to enter into agreements and cooperate with the United States in matters relating to the use or administration of lands for parks transferred for such purposes.

NEW JERSEY

An act to establish a New Jersey Water Authority and defining its powers. Approved.

S.311. Authorizes the acquisition of land within the State by the United States for use by the State for forestry, watershed, wildlife and public recreation purposes. Approved.

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